

Pinal County Air Quality

Arizona's Designation
Recommendation Under the
8-Hour Ozone Standard
June 26, 2003

Summary

- Pinal deserves “attainment.”
- No violations in Pinal.
- No demonstration of “contribution” to Maricopa ozone incidents.
- The CAA “MSA presumption” doesn’t apply to Pinal.
- Any additional planning should occur as an attainment area plan under CAA §110.

Ambient Standards

- The Act requires that EPA define ambient standards.
 - To protect public health
 - To provide an "adequate margin of safety"

The Act Requires a SIP to Implement the Standards

SIP requirements impose 3 principal obligations

- Monitor to assess compliance with the ambient standards.
- For areas that attain, develop an "attainment area" plan to assure that:
 - the area doesn't fall into violation
 - the area doesn't contribute to violations elsewhere.
- For areas that violate a standard, develop a curative "nonattainment area" plan to fix the problem.

Making Designations

- For a new ambient standard, the Act calls on the Governor to make attainment/nonattainment recommendations.
- Within the limits imposed by the Clean Air Act, the EPA has the final call on attainment/nonattainment designations

The Statutory Standard - Clean Air Act §107

- In making designations, the Clean Air Act looks to current conditions
 - “Nonattainment” reflects areas that violate or contribute to violation.
 - “Attainment” reflects areas that meet the standard and don't contribute to violations.
 - “Unclassifiable” reflects areas where information is lacking.
- “Nonattainment” should reflect current fact, and not an effort at preemptive planning.

Monitoring as an Attainment/Nonattainment Indicator

- Monitoring provides a direct indicator of prevailing air quality.
- Monitoring is straightforward – if a monitor shows violations, the area merits “nonattainment.”
- Monitors in Pinal County do not show violations of the 8-hour standard.

“Contribution” as an Attainment/Nonattainment Indicator

- Ground-level ozone results from a complex atmospheric process.
- "Contribution" to an ozone violation can't be directly measured.
- “Contribution” can only be shown through technical or rational analysis.
- Concluding that an area "contributes" requires more than conjecture.

Attribution of relative "contribution"

- Accountability means you have to put a number on it.
- Modeling hasn't proven adequate for quantifying geographic contributions to ozone formation.
- Without credible numerical modeling, attributing geography-specific "causation" involves substantial uncertainty.

Who bears the burden of proving or dis-proving "contribution"?

- CAA §107 doesn't impose such a burden
 - If the facts remain in question, CAA §107 mandates an "unclassifiable" designation
- EPA guidance (Seitz, 3/28/00) presumes nonattainment for an entire MSA.
 - Anyone who wants "out" has to justify the "exemption"
 - You're "guilty" unless you can prove your innocence.
- The Seitz guidance conflicts with the "unclassifiable" mandate under CAA §107.

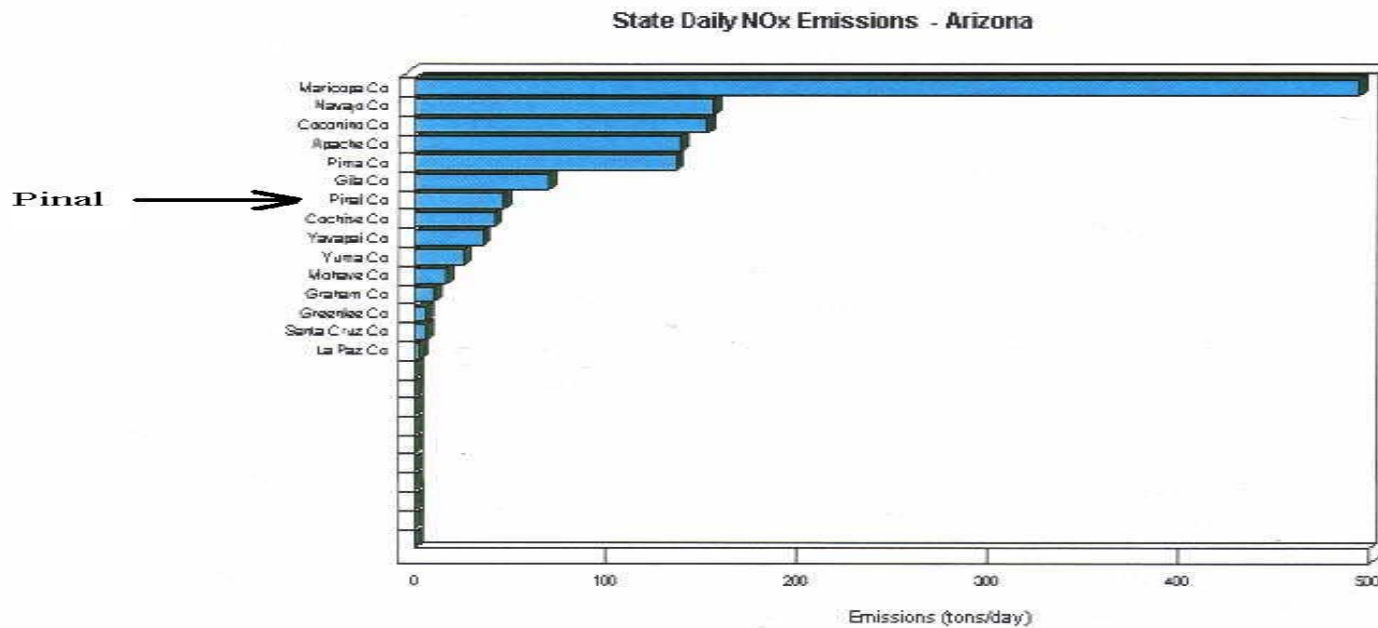
MSA Relevance

- **OMB BULLETIN NO. 99-04**
- OMB establishes and maintains the definitions of MAs solely for statistical purposes. ... OMB does not take into account or attempt to anticipate any nonstatistical uses that may be made of the definitions
- [W]here there is no statutory requirement and an agency elects to use the MA definitions in a **nonstatistical** program, it is the sponsoring agency's responsibility to ensure that the definitions are appropriate for such use. When an agency is publishing for comment a proposed regulation that would use the MA definitions for a nonstatistical purpose, the agency should seek public comment on the proposed use of the MA definitions.

Under the Seitz guidance, how do you prove "innocence"?

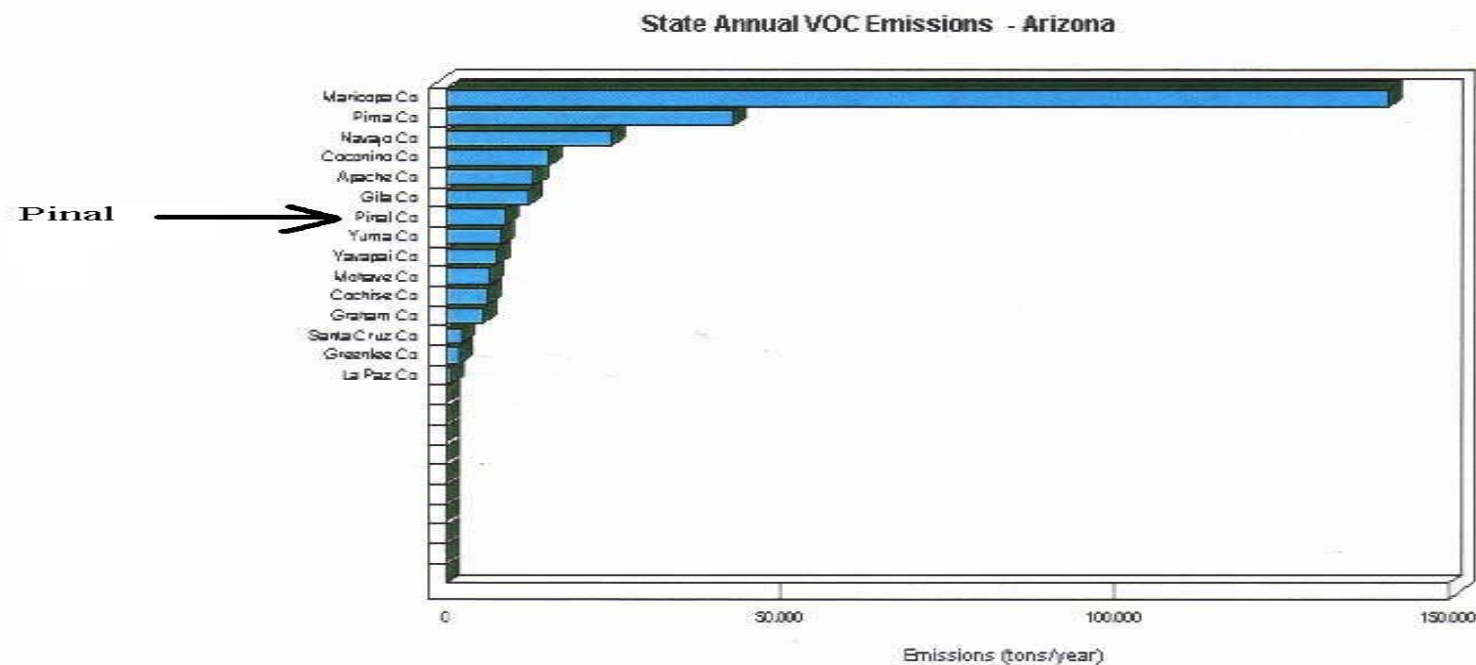
- “Air quality planning is something you do after you have a problem.”
 - Historically, the EPA hasn’t provided planning support for attainment areas.
 - Comprehensive emission inventories haven’t been developed for attainment areas.
- The EPA's models haven't yet evolved to the stage where they enable a compelling conclusion regarding “contribution.”
- Without relevant facts or workable analytical tools, there’s no way to prove “innocence.”

“Causation” from Pinal Sources; NOx Inventory



EPA REPORT (05/24/2000)

“Causation” from Pinal Sources; VOC Inventory

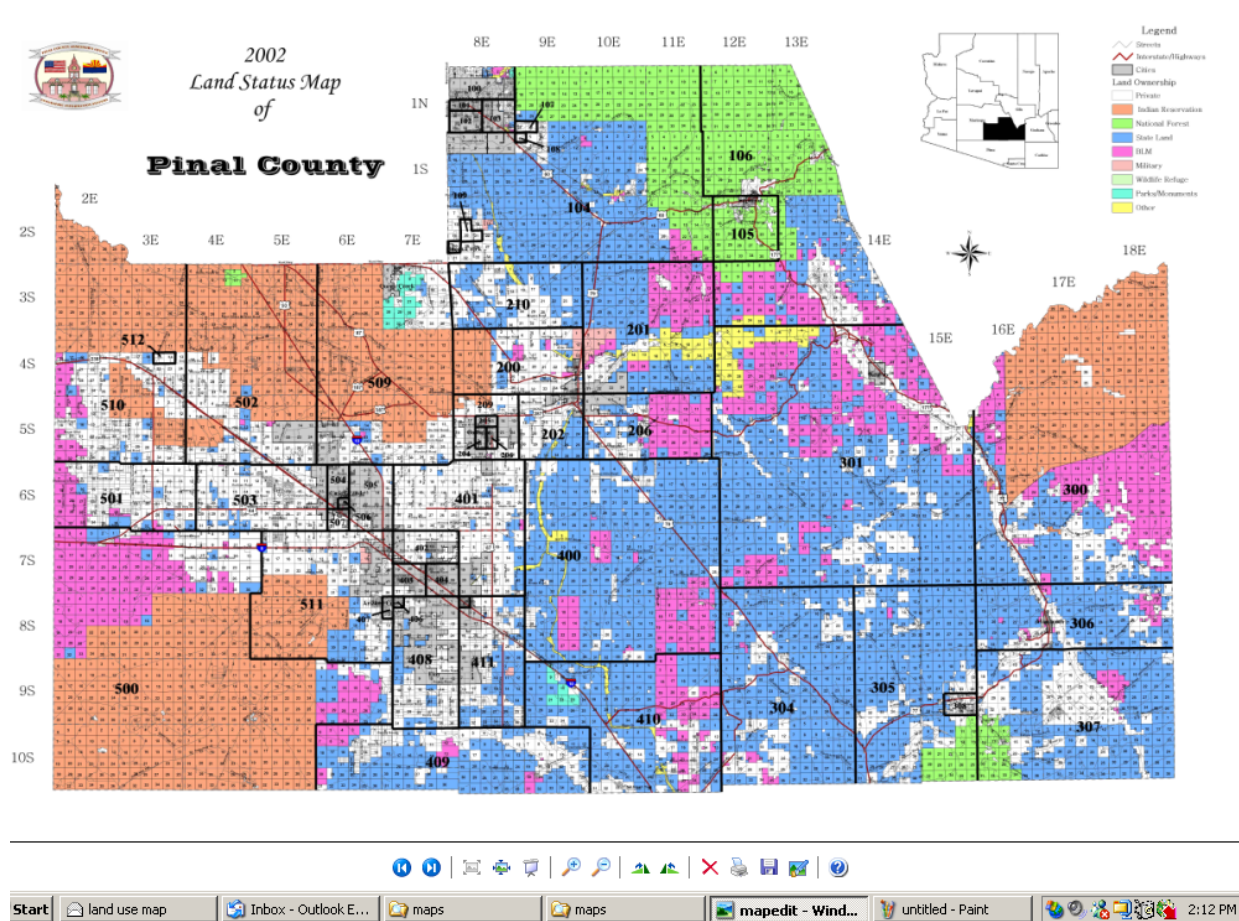


EPA REPORT (05/24/2000)

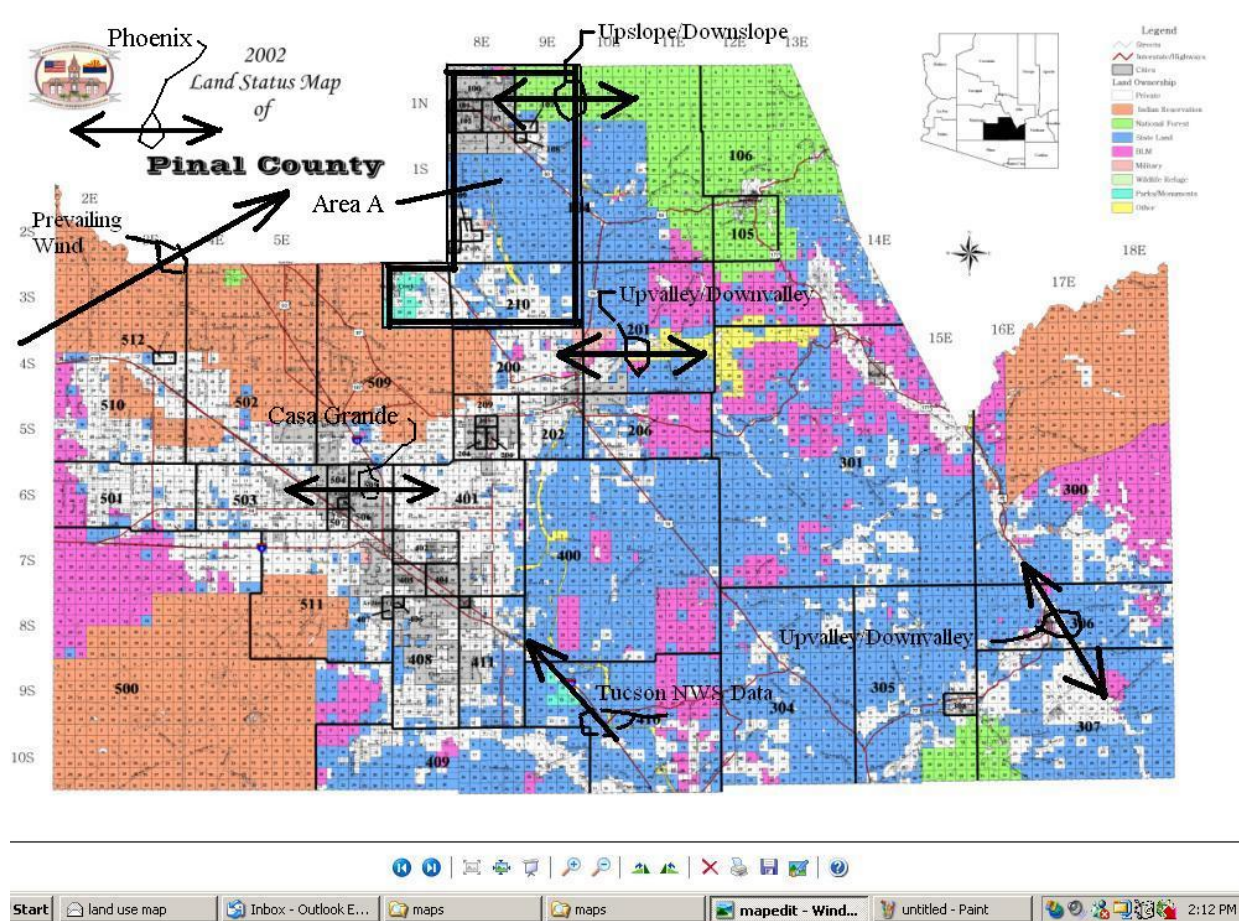
Pinal Emissions; Distribution and Transport

- Prevailing land use limits geographic distribution of emissions
 - 35% of the county is State Trust Land, used for ranching and farming
 - 20% of the county is Indian lands
 - 17% of the county is held by the Federal Government
 - Only 26% of the county is privately held.
- Empirical observation of wind patterns further limits transport to Maricopa

Pinal County Land Use



Pinal County – Wind Patterns



Conclusion – “Contribution” from Pinal County

- Wind patterns dictate that only “Area A” emissions from Pinal have the potential to affect Maricopa.
- Rational analysis predicts Pinal “Area A” VOC emissions “contribute” about 0.28% to the daily emissions of VOCs in Maricopa.
- Rational analysis predicts Pinal “Area A” NO_x emissions “contribute” about 0.31% to the daily emissions of NO_x in Maricopa.
- Pinal “contributes” virtually nothing to ozone formation in Maricopa.

Other practical issues - source controls

- Vehicle and mobile source emissions dominate the emission inventory
 - Expanding auto emission testing will require action by the legislature
 - The Legislature doesn't need nonattainment mandates to expand the testing program.
- Nonattainment will require LAER and RACT control requirements for stationary sources, which aren't the real problem.
- Combining Pinal and Maricopa in nonattainment will create pressure to impose existing serious area BACT/BACM as RACT in Pinal. Nothing justifies such a shock to sources in Pinal.

Other practical issues - Planning Authority

- Including Pinal in an 8-hour nonattainment will extend the nonattainment area beyond the existing MAG MPO boundary.
- MAG has statutory planning authority within the MPO; ADEQ has statutory planning authority outside the MPO.
- A single nonattainment area that straddles the MPO boundary will require a clarification of planning authority.

Attainment Area Planning Needs

- Pinal County isn't the only "growing" area of Arizona.
- How big will we get? Cottonwood to Benson?
- Attainment areas should have the benefit of a meaningful plan to assure that they do not fall into nonattainment.
- The need for attainment area planning extends throughout much of Arizona.
- If growth justifies additional control strategies, such as emission testing or fuel formulations, impose those measures under an attainment area plan.
- We don't need a federal mandate to do the right thing.

Conclusion

- Data doesn't show ozone violations in Pinal
- Pinal does not meaningfully “contribute”
- EPA's “MSA presumption” guidance conflicts with the CAA, and should not apply to Pinal
- Pinal deserves an attainment designation.
- Arizona and Pinal both need continuing attainment area planning.